

**TRENTON/MERCER NJ**

Latitude = 40.28 N

Longitude = 74.82 W

Period of Record = 1973 to 1996

WMO No. 724095

Elevation = 213 feet

Average Pressure = 29.77 inches Hg

**Design Criteria Data**

|                                                  | <b>Design Value</b> | Mean Coincident (Average) Values |                         |                        |                             |
|--------------------------------------------------|---------------------|----------------------------------|-------------------------|------------------------|-----------------------------|
|                                                  |                     | Wet Bulb Temperature (°F)        | Humidity Ratio (gr/lb)  | Wind Speed (mph)       | Prevailing Direction (NSEW) |
| <b>Dry Bulb Temperature (T)</b>                  | <b>(°F)</b>         |                                  |                         |                        |                             |
| Median of Extreme Highs                          | 97                  | 78                               | 117                     | 11.9                   | W                           |
| 0.4% Occurrence                                  | 93                  | 76                               | 109                     | 11.0                   | W                           |
| 1.0% Occurrence                                  | 90                  | 75                               | 105                     | 10.7                   | W                           |
| 2.0% Occurrence                                  | 87                  | 73                               | 100                     | 10.6                   | W                           |
| Mean Daily Range                                 | 18                  | -                                | -                       | -                      | -                           |
| 97.5% Occurrence                                 | 18                  | 15                               | 7                       | 11.4                   | NW                          |
| 99.0% Occurrence                                 | 13                  | 11                               | 5                       | 11.9                   | NW                          |
| 99.6% Occurrence                                 | 8                   | 6                                | 4                       | 11.8                   | NW                          |
| Median of Extreme Lows                           | 2                   | 0                                | 3                       | 13.1                   | W                           |
|                                                  | <b>Design Value</b> | Mean Coincident (Average) Values |                         |                        |                             |
|                                                  |                     | Dry Bulb Temperature (°F)        | Humidity Ratio (gr/lb)  | Wind Speed (mph)       | Prevailing Direction (NSEW) |
| <b>Wet Bulb Temperature (T<sub>wb</sub>)</b>     | <b>(°F)</b>         |                                  |                         |                        |                             |
| Median of Extreme Highs                          | 81                  | 90                               | 141                     | 9.8                    | W                           |
| 0.4% Occurrence                                  | 78                  | 87                               | 128                     | 10.0                   | WSW                         |
| 1.0% Occurrence                                  | 77                  | 86                               | 125                     | 9.9                    | WSW                         |
| 2.0% Occurrence                                  | 75                  | 83                               | 117                     | 9.6                    | WSW                         |
|                                                  | <b>Design Value</b> | Mean Coincident (Average) Values |                         |                        |                             |
|                                                  |                     | Dry Bulb Temperature (°F)        | Vapor Pressure (in. Hg) | Wind Speed (mph)       | Prevailing Direction (NSEW) |
| <b>Humidity Ratio (HR)</b>                       | <b>(gr/lb)</b>      |                                  |                         |                        |                             |
| Median of Extreme Highs                          | 142                 | 83                               | 0.94                    | 9.3                    | SW                          |
| 0.4% Occurrence                                  | 136                 | 83                               | 0.90                    | 8.8                    | WSW                         |
| 1.0% Occurrence                                  | 128                 | 82                               | 0.85                    | 8.5                    | WSW                         |
| 2.0% Occurrence                                  | 120                 | 80                               | 0.79                    | 9.4                    | W                           |
| <b>Air Conditioning/<br/>Humid Area Criteria</b> | <b># of Hours</b>   | T ≥ 93°F                         | T ≥ 80°F                | T <sub>wb</sub> ≥ 73°F | T <sub>wb</sub> ≥ 67°F      |
|                                                  |                     | 34                               | 714                     | 331                    | 1052                        |

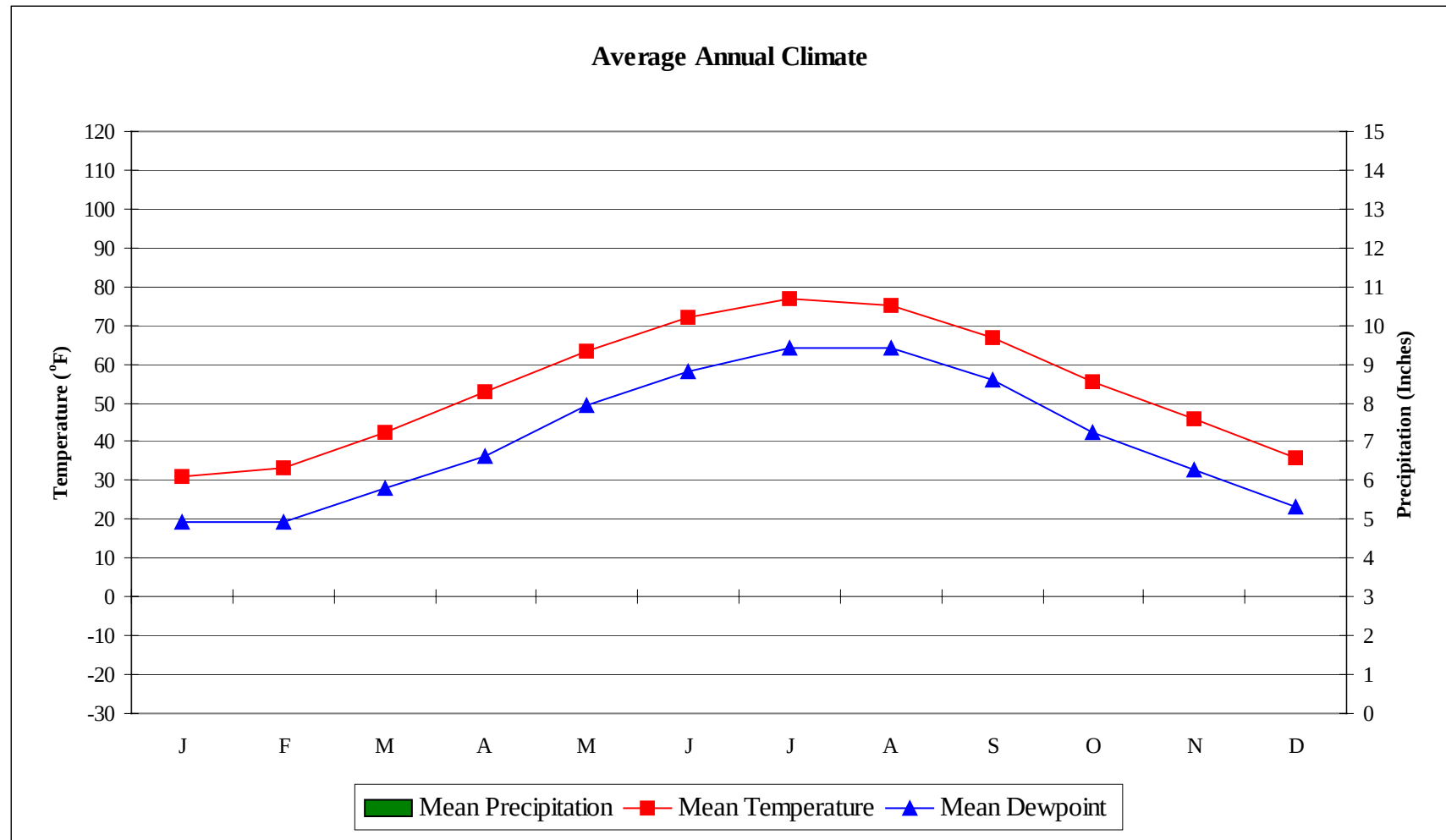
**Other Site Data**

| Weather Region                                      | Rain Rate<br>100 Year Recurrence<br>(in./hr) | Basic Wind Speed<br>3 sec gust @ 33 ft<br>50 Year Recurrence (mph) | Ventilation Cooling Load Index<br>(Ton-hr/cfm/yr) Base 75°F-RH 60%<br>Latent + Sensible |
|-----------------------------------------------------|----------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 7                                                   | 3.1                                          | 110                                                                | 1.1 + 0.6                                                                               |
| Ground Water<br>Temperature (°F)<br>50 Foot Depth * | Frost Depth<br>50 Year Recurrence<br>(in.)   | Ground Snow Load<br>50 Year Recurrence<br>(lb/ft <sup>2</sup> )    | Average Annual<br>Freeze-Thaw Cycles<br>(#)                                             |
| 56.9                                                | N/A                                          | N/A                                                                | 56                                                                                      |

\*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

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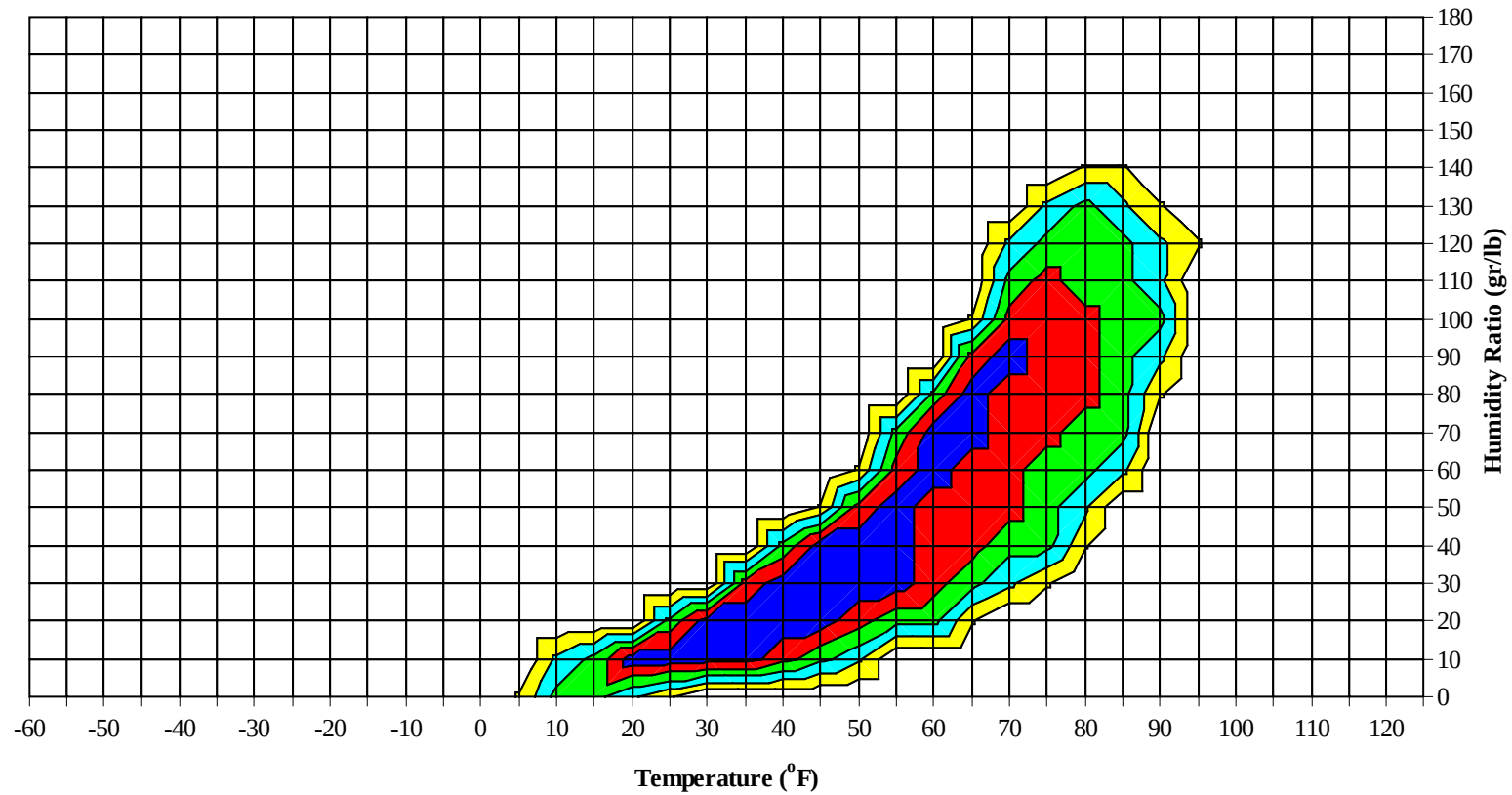


No Precipitation Data Available

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### Long Term Psychrometric Summary

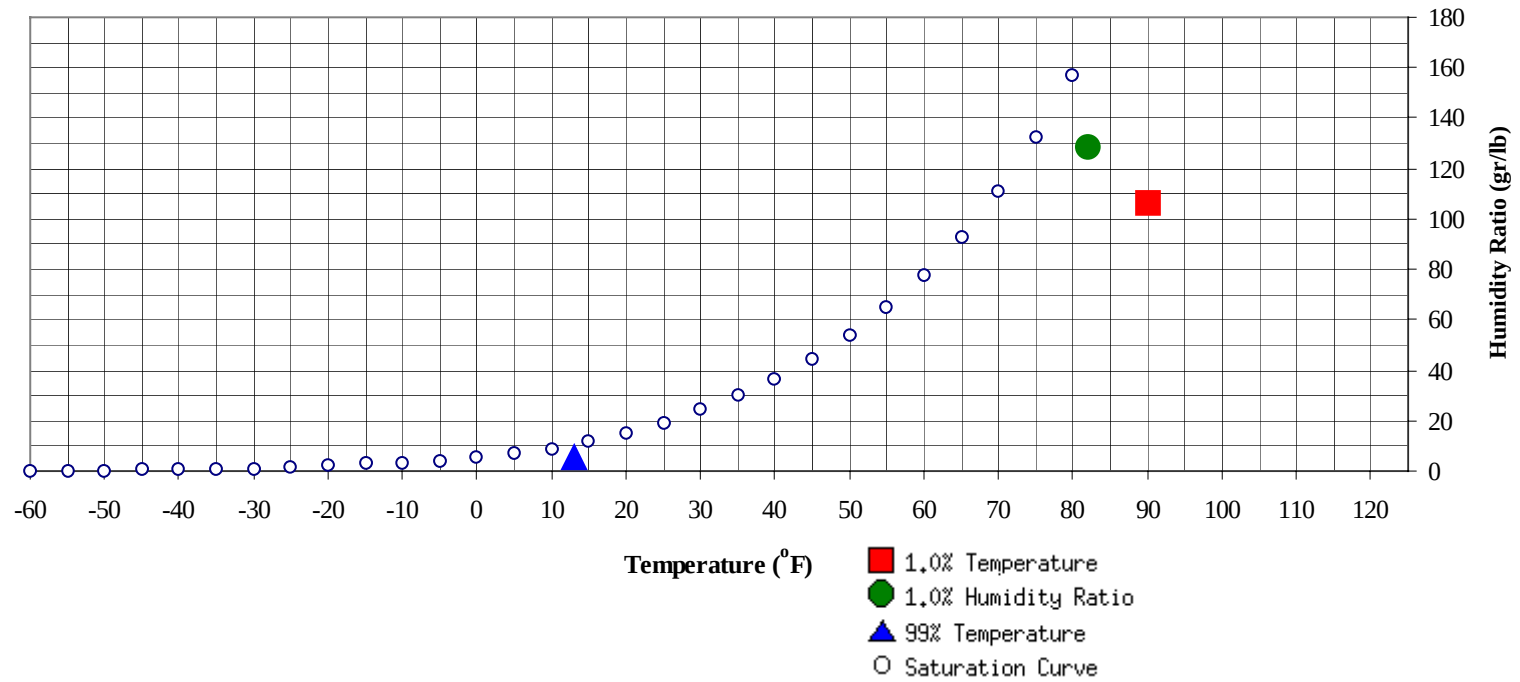


- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

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## Psychrometric Summary of Peak Design Values



| 99% Dry Bulb | (°F) | MCHR<br>(gr/lb) | Enthalpy<br>(btu/lb) | 1.0% Humidity<br>Ratio | (gr/lb) | MCDB<br>(°F) | MCWB<br>(°F) | MC Dewpt<br>(°F) | Enthalpy<br>(btu/lb) |
|--------------|------|-----------------|----------------------|------------------------|---------|--------------|--------------|------------------|----------------------|
|              | 13   | 5.5             | 4.0                  |                        | 128.1   | 82           | 76.2         | 74               | 39.8                 |

| 1.0% Dry Bulb | (°F) | MCHR<br>(gr/lb) | MCWB<br>(°F) | Enthalpy<br>(btu/lb) |
|---------------|------|-----------------|--------------|----------------------|
|               | 90   | 106.2           | 74.9         | 38.3                 |

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**Dry-Bulb Temperature Hours For An Average Year (Sheet 1 of 5)**

Period of Record = 1973 to 1996

| Temperature<br>Range<br>(°F) | January             |                |                |              |                          | February            |                |                |              |                          | March               |                |                |              |                          |
|------------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|
|                              | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) |
|                              | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          |
| 100 / 104                    |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 95 / 99                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 90 / 94                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 85 / 89                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 80 / 84                      |                     |                |                |              |                          |                     |                |                |              |                          |                     | 1              | 0              | 1            | 65.0                     |
| 75 / 79                      |                     |                |                |              |                          |                     |                |                |              |                          |                     | 3              | 1              | 3            | 63.5                     |
| 70 / 74                      |                     | 0              |                | 0            | 58.0                     |                     | 0              | 0              | 0            |                          |                     | 5              | 3              | 8            | 59.8                     |
| 65 / 69                      |                     | 1              | 0              | 1            | 61.3                     |                     | 3              | 1              | 3            | 53.6                     | 1                   | 8              | 5              | 15           | 56.1                     |
| 60 / 64                      | 2                   | 3              | 2              | 6            | 57.2                     | 0                   | 4              | 2              | 6            | 52.9                     | 3                   | 15             | 9              | 27           | 52.7                     |
| 55 / 59                      | 3                   | 5              | 3              | 12           | 52.5                     | 1                   | 8              | 5              | 15           | 50.1                     | 9                   | 22             | 16             | 46           | 49.5                     |
| 50 / 54                      | 3                   | 8              | 5              | 16           | 46.3                     | 4                   | 14             | 12             | 31           | 45.7                     | 13                  | 35             | 29             | 77           | 44.8                     |
| 45 / 49                      | 5                   | 19             | 11             | 35           | 41.4                     | 12                  | 22             | 15             | 49           | 41.0                     | 23                  | 40             | 37             | 101          | 40.9                     |
| 40 / 44                      | 12                  | 34             | 25             | 72           | 36.7                     | 16                  | 32             | 27             | 75           | 36.5                     | 43                  | 43             | 45             | 131          | 36.7                     |
| 35 / 39                      | 34                  | 45             | 43             | 123          | 32.6                     | 25                  | 37             | 37             | 99           | 32.2                     | 48                  | 36             | 45             | 130          | 32.0                     |
| 30 / 34                      | 47                  | 48             | 47             | 141          | 28.2                     | 36                  | 36             | 41             | 114          | 27.8                     | 48                  | 24             | 31             | 103          | 27.8                     |
| 25 / 29                      | 39                  | 35             | 44             | 118          | 23.3                     | 33                  | 32             | 37             | 103          | 22.8                     | 29                  | 9              | 17             | 55           | 23.1                     |
| 20 / 24                      | 39                  | 25             | 30             | 94           | 19.0                     | 38                  | 19             | 25             | 81           | 18.8                     | 15                  | 4              | 7              | 26           | 18.6                     |
| 15 / 19                      | 33                  | 15             | 19             | 67           | 14.5                     | 31                  | 9              | 13             | 53           | 14.3                     | 10                  | 2              | 3              | 15           | 14.5                     |
| 10 / 14                      | 17                  | 6              | 11             | 34           | 9.8                      | 15                  | 4              | 7              | 26           | 9.8                      | 4                   | 0              | 1              | 5            | 10.3                     |
| 5 / 9                        | 8                   | 3              | 3              | 14           | 5.2                      | 7                   | 2              | 2              | 11           | 5.5                      | 0                   |                | 0              | 0            | 5.7                      |
| 0 / 4                        | 3                   | 2              | 2              | 7            | 0.5                      | 4                   | 0              | 0              | 4            | 0.5                      | 0                   |                |                | 0            |                          |
| -5 / -1                      | 2                   | 0              | 1              | 2            | -3.3                     | 1                   |                |                | 1            | -3.5                     |                     |                |                |              |                          |
| -10 / -6                     | 0                   | 0              | 0              | 0            | -7.3                     |                     |                |                |              |                          |                     |                |                |              |                          |
| -15 / -11                    | 2                   | 0              |                | 2            | -12.0                    |                     |                |                |              |                          |                     |                |                |              |                          |

**Caution:** This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

TRENTON/MERCER NJ

WMO No. 724095

**Dry-Bulb Temperature Hours For An Average Year (Sheet 2 of 5)**

Period of Record = 1973 to 1996

| Temperature<br>Range<br>(°F) | April               |                |                |              |                          | May                 |                |                |              |                          | June                |                |                |              |                          |
|------------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|
|                              | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) |
|                              | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          |
| 100 / 104                    |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 95 / 99                      |                     |                |                |              |                          | 0                   |                |                | 0            |                          |                     | 1              | 0              | 1            | 77.6                     |
| 90 / 94                      |                     | 1              |                | 1            | 69.6                     | 3                   | 0              | 3              | 72.6         |                          | 11                  | 3              | 14             | 74.2         |                          |
| 85 / 89                      |                     | 3              | 1              | 3            | 67.2                     | 11                  | 3              | 14             | 69.5         |                          | 0                   | 28             | 11             | 38           | 71.8                     |
| 80 / 84                      |                     | 4              | 2              | 6            | 64.9                     | 0                   | 19             | 9              | 28           | 67.5                     | 3                   | 52             | 29             | 84           | 68.9                     |
| 75 / 79                      | 0                   | 8              | 4              | 12           | 61.9                     | 4                   | 31             | 19             | 54           | 64.5                     | 15                  | 59             | 48             | 123          | 66.6                     |
| 70 / 74                      | 1                   | 17             | 10             | 28           | 59.1                     | 11                  | 43             | 35             | 89           | 61.3                     | 47                  | 46             | 60             | 154          | 64.4                     |
| 65 / 69                      | 5                   | 23             | 14             | 43           | 55.5                     | 28                  | 43             | 41             | 113          | 58.3                     | 66                  | 26             | 45             | 137          | 60.8                     |
| 60 / 64                      | 15                  | 35             | 28             | 78           | 52.0                     | 50                  | 43             | 50             | 143          | 55.3                     | 57                  | 14             | 31             | 102          | 57.2                     |
| 55 / 59                      | 20                  | 44             | 36             | 99           | 48.4                     | 51                  | 31             | 41             | 124          | 51.4                     | 29                  | 3              | 10             | 42           | 52.5                     |
| 50 / 54                      | 39                  | 45             | 47             | 131          | 45.1                     | 53                  | 18             | 33             | 104          | 47.6                     | 15                  | 0              | 3              | 18           | 48.2                     |
| 45 / 49                      | 57                  | 37             | 47             | 141          | 41.1                     | 32                  | 3              | 13             | 48           | 43.5                     | 5                   |                | 1              | 6            | 44.1                     |
| 40 / 44                      | 51                  | 17             | 34             | 101          | 37.3                     | 15                  | 1              | 4              | 20           | 39.0                     | 1                   |                |                | 1            | 40.2                     |
| 35 / 39                      | 31                  | 4              | 12             | 47           | 31.9                     | 3                   |                | 0              | 3            | 34.6                     |                     |                |                |              |                          |
| 30 / 34                      | 16                  | 2              | 4              | 21           | 28.0                     | 1                   |                |                | 1            | 29.3                     |                     |                |                |              |                          |
| 25 / 29                      | 4                   | 0              | 1              | 5            | 23.9                     |                     |                |                |              |                          |                     |                |                |              |                          |
| 20 / 24                      | 1                   | 0              | 0              | 1            | 19.1                     |                     |                |                |              |                          |                     |                |                |              |                          |
| 15 / 19                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 10 / 14                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 5 / 9                        |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 0 / 4                        |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| -5 / -1                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| -10 / -6                     |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| -15 / -11                    |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |

**Caution:** This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

TRENTON/MERCER NJ

WMO No. 724095

**Dry-Bulb Temperature Hours For An Average Year (Sheet 3 of 5)**

Period of Record = 1973 to 1996

| Temperature<br>Range<br>(°F) | July                |                |                |              |                          | August              |                |                |              |                          | September           |                |                |              |                          |
|------------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|
|                              | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) |
|                              | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          |
| 100 / 104                    |                     | 0              | 0              | 0            | 79.3                     |                     | 0              |                | 0            | 81.0                     |                     | 0              |                | 0            |                          |
| 95 / 99                      |                     | 7              | 1              | 8            | 78.1                     |                     | 2              | 0              | 2            | 78.9                     |                     | 1              | 0              | 1            | 79.5                     |
| 90 / 94                      |                     | 23             | 9              | 32           | 75.5                     |                     | 13             | 3              | 15           | 76.5                     |                     | 4              | 1              | 5            | 77.5                     |
| 85 / 89                      | 1                   | 54             | 24             | 79           | 73.1                     | 0                   | 47             | 17             | 64           | 73.9                     | 0                   | 11             | 3              | 14           | 72.5                     |
| 80 / 84                      | 9                   | 70             | 49             | 128          | 70.7                     | 4                   | 70             | 35             | 109          | 71.4                     | 0                   | 28             | 10             | 39           | 70.2                     |
| 75 / 79                      | 40                  | 55             | 64             | 158          | 69.1                     | 33                  | 62             | 64             | 159          | 69.4                     | 5                   | 44             | 26             | 76           | 67.8                     |
| 70 / 74                      | 90                  | 28             | 63             | 181          | 67.2                     | 88                  | 36             | 72             | 195          | 67.3                     | 30                  | 56             | 47             | 133          | 64.8                     |
| 65 / 69                      | 66                  | 9              | 31             | 105          | 62.9                     | 60                  | 13             | 37             | 110          | 62.8                     | 44                  | 49             | 50             | 142          | 60.7                     |
| 60 / 64                      | 30                  | 2              | 8              | 39           | 58.5                     | 41                  | 4              | 17             | 62           | 58.6                     | 52                  | 33             | 48             | 132          | 57.0                     |
| 55 / 59                      | 10                  | 0              | 1              | 11           | 53.8                     | 15                  | 1              | 3              | 18           | 53.8                     | 46                  | 11             | 35             | 92           | 52.8                     |
| 50 / 54                      | 3                   |                | 0              | 3            | 50.7                     | 7                   | 0              | 0              | 7            | 49.7                     | 35                  | 3              | 14             | 52           | 48.0                     |
| 45 / 49                      | 0                   |                |                | 0            | 43.0                     | 1                   |                | 0              | 1            | 43.8                     | 16                  | 1              | 6              | 23           | 43.5                     |
| 40 / 44                      |                     |                |                |              |                          | 0                   |                |                | 0            |                          | 8                   |                | 1              | 9            | 39.8                     |
| 35 / 39                      |                     |                |                |              |                          |                     |                |                |              |                          | 3                   |                | 0              | 3            | 35.3                     |
| 30 / 34                      |                     |                |                |              |                          |                     |                |                |              |                          | 0                   |                |                | 0            |                          |
| 25 / 29                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 20 / 24                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 15 / 19                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 10 / 14                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 5 / 9                        |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 0 / 4                        |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| -5 / -1                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| -10 / -6                     |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| -15 / -11                    |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |

**Caution:** This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

TRENTON/MERCER NJ

WMO No. 724095

**Dry-Bulb Temperature Hours For An Average Year (Sheet 4 of 5)**

Period of Record = 1973 to 1996

| Temperature<br>Range<br>(°F) | October             |                |                |              |                          | November            |                |                |              |                          | December            |                |                |              |                          |
|------------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|
|                              | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) |
|                              | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          |
| 100 / 104                    |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 95 / 99                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 90 / 94                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 85 / 89                      |                     | 0              |                | 0            | 68.7                     |                     |                |                |              |                          |                     |                |                |              |                          |
| 80 / 84                      |                     | 4              | 0              | 4            | 66.7                     |                     |                |                |              |                          |                     |                |                |              |                          |
| 75 / 79                      | 0                   | 11             | 2              | 13           | 65.3                     |                     | 3              | 0              | 3            | 63.5                     |                     |                |                |              |                          |
| 70 / 74                      | 3                   | 26             | 10             | 39           | 62.3                     |                     | 6              | 2              | 8            | 61.4                     | 0                   | 0              |                | 0            | 56.0                     |
| 65 / 69                      | 7                   | 39             | 23             | 69           | 59.2                     | 3                   | 13             | 5              | 21           | 59.0                     | 0                   | 1              | 0              | 1            | 60.4                     |
| 60 / 64                      | 25                  | 51             | 38             | 114          | 55.1                     | 9                   | 23             | 15             | 47           | 55.3                     | 2                   | 5              | 3              | 10           | 56.3                     |
| 55 / 59                      | 33                  | 52             | 48             | 133          | 50.5                     | 14                  | 34             | 25             | 73           | 50.7                     | 5                   | 8              | 6              | 18           | 52.1                     |
| 50 / 54                      | 45                  | 38             | 51             | 134          | 46.2                     | 23                  | 41             | 33             | 97           | 45.6                     | 8                   | 18             | 12             | 38           | 46.4                     |
| 45 / 49                      | 48                  | 21             | 41             | 110          | 41.8                     | 33                  | 44             | 38             | 115          | 40.7                     | 14                  | 38             | 20             | 72           | 41.3                     |
| 40 / 44                      | 44                  | 5              | 22             | 71           | 37.8                     | 42                  | 38             | 45             | 125          | 36.4                     | 25                  | 47             | 39             | 111          | 36.8                     |
| 35 / 39                      | 26                  | 0              | 10             | 36           | 33.3                     | 42                  | 24             | 42             | 109          | 32.1                     | 43                  | 48             | 52             | 143          | 32.4                     |
| 30 / 34                      | 14                  | 0              | 4              | 17           | 29.6                     | 47                  | 10             | 24             | 81           | 28.2                     | 54                  | 38             | 47             | 139          | 27.8                     |
| 25 / 29                      | 3                   |                | 0              | 3            | 25.4                     | 19                  | 3              | 8              | 30           | 23.9                     | 41                  | 23             | 33             | 96           | 23.3                     |
| 20 / 24                      | 1                   |                |                | 1            | 21.7                     | 6                   | 0              | 3              | 9            | 19.9                     | 27                  | 13             | 19             | 59           | 18.8                     |
| 15 / 19                      |                     |                |                |              |                          | 2                   | 0              | 1              | 2            | 14.6                     | 16                  | 7              | 12             | 34           | 14.5                     |
| 10 / 14                      |                     |                |                |              |                          |                     |                | 0              | 0            | 10.0                     | 9                   | 2              | 3              | 15           | 10.2                     |
| 5 / 9                        |                     |                |                |              |                          |                     |                |                |              |                          | 3                   | 1              | 1              | 5            | 5.3                      |
| 0 / 4                        |                     |                |                |              |                          |                     |                |                |              |                          | 2                   | 0              | 1              | 2            | 1.6                      |
| -5 / -1                      |                     |                |                |              |                          |                     |                |                |              |                          | 0                   | 0              | 0              | 0            |                          |
| -10 / -6                     |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| -15 / -11                    |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |

**Caution:** This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

TRENTON/MERCER NJ

WMO No. 724095

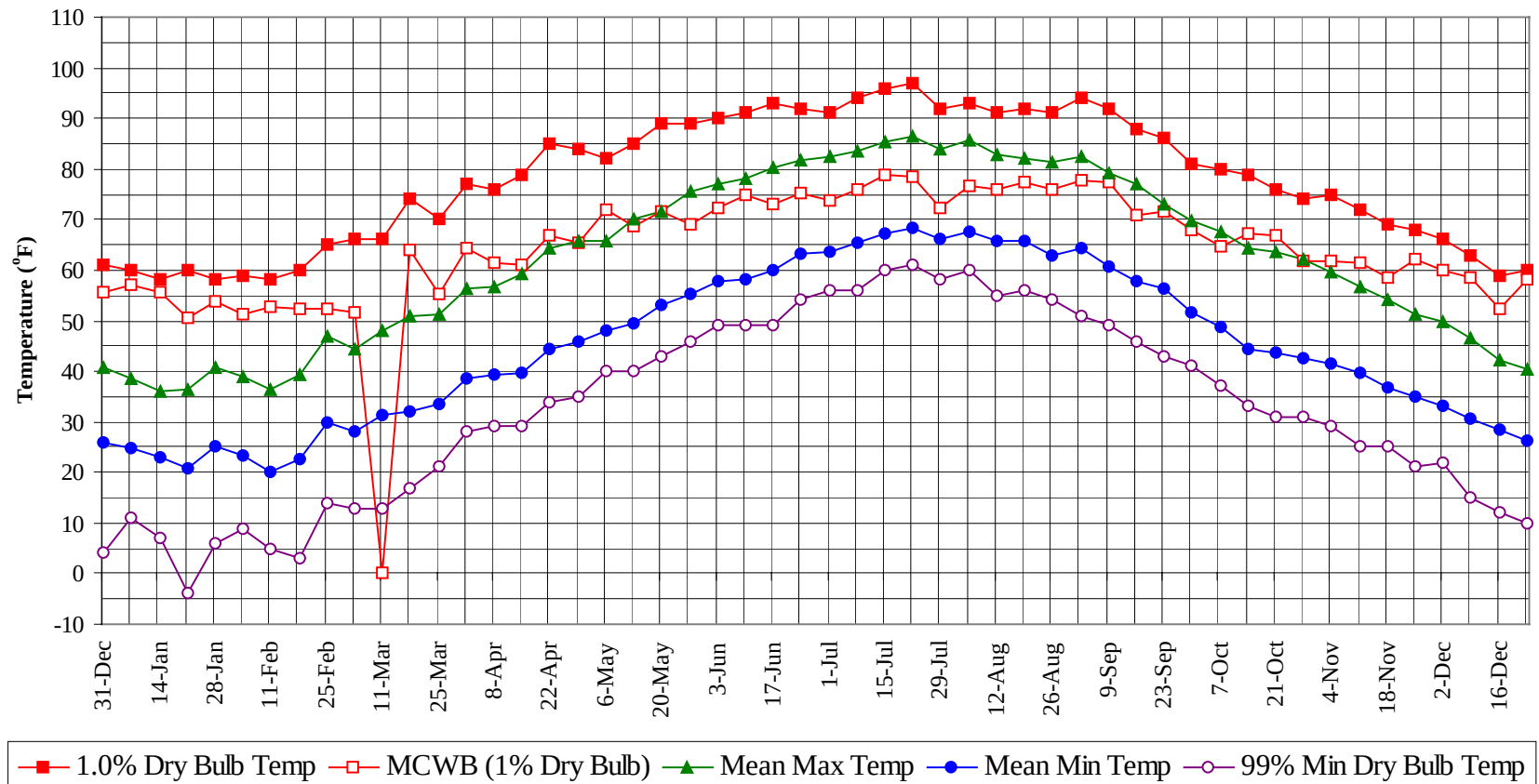
**Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)**

Period of Record = 1973 to 1996

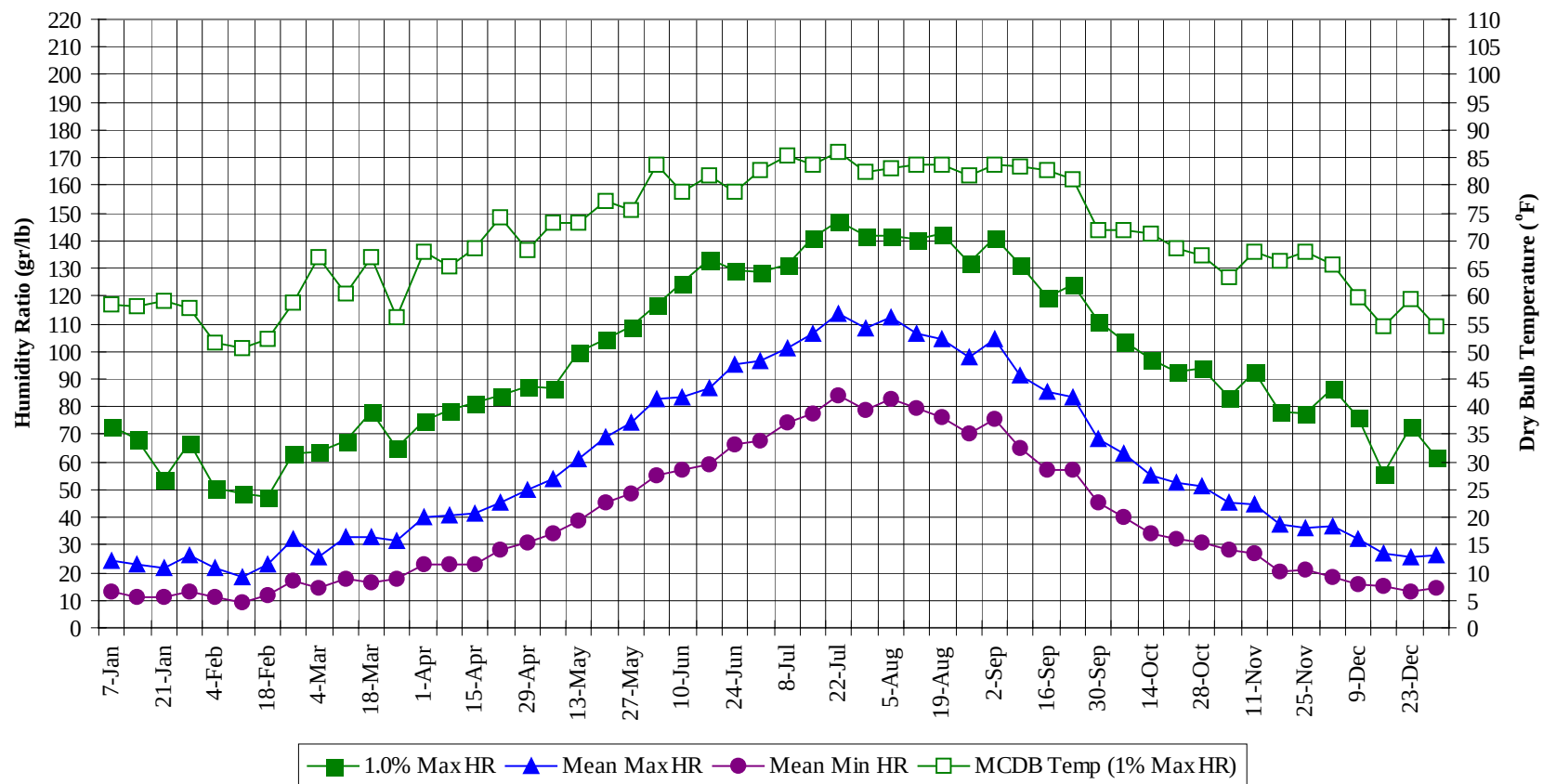
| Annual Totals                |                     |                |                |              |                          |
|------------------------------|---------------------|----------------|----------------|--------------|--------------------------|
| Temperature<br>Range<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) |
|                              | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          |
| 100 / 104                    |                     | 1              | 0              | 1            | 79.5                     |
| 95 / 99                      |                     | 11             | 2              | 13           | 78.2                     |
| 90 / 94                      |                     | 55             | 15             | 69           | 75.4                     |
| 85 / 89                      | 1                   | 152            | 55             | 208          | 72.8                     |
| 80 / 84                      | 17                  | 246            | 128            | 390          | 70.1                     |
| 75 / 79                      | 103                 | 275            | 218            | 596          | 67.7                     |
| 70 / 74                      | 286                 | 264            | 289            | 840          | 64.9                     |
| 65 / 69                      | 299                 | 231            | 244            | 774          | 60.3                     |
| 60 / 64                      | 301                 | 236            | 245            | 783          | 55.7                     |
| 55 / 59                      | 248                 | 222            | 229            | 699          | 50.9                     |
| 50 / 54                      | 258                 | 222            | 244            | 723          | 46.1                     |
| 45 / 49                      | 247                 | 226            | 233            | 705          | 41.4                     |
| 40 / 44                      | 254                 | 217            | 251            | 722          | 36.9                     |
| 35 / 39                      | 240                 | 195            | 252            | 687          | 32.3                     |
| 30 / 34                      | 243                 | 156            | 204            | 603          | 28.0                     |
| 25 / 29                      | 154                 | 101            | 144            | 399          | 23.2                     |
| 20 / 24                      | 113                 | 61             | 86             | 260          | 18.9                     |
| 15 / 19                      | 82                  | 33             | 49             | 164          | 14.5                     |
| 10 / 14                      | 42                  | 11             | 23             | 76           | 9.9                      |
| 5 / 9                        | 18                  | 5              | 6              | 30           | 5.3                      |
| 0 / 4                        | 8                   | 2              | 3              | 13           | 0.6                      |
| -5 / -1                      | 3                   | 0              | 1              | 4            | -3.4                     |
| -10 / -6                     | 0                   | 0              | 0              | 0            | -7.3                     |
| -15 / -11                    | 1                   | 0              |                | 1            | -12.0                    |
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**Caution:** This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

## Annual Summary of Temperatures



## Long Term Humidity and Dry Bulb Temperature Summary

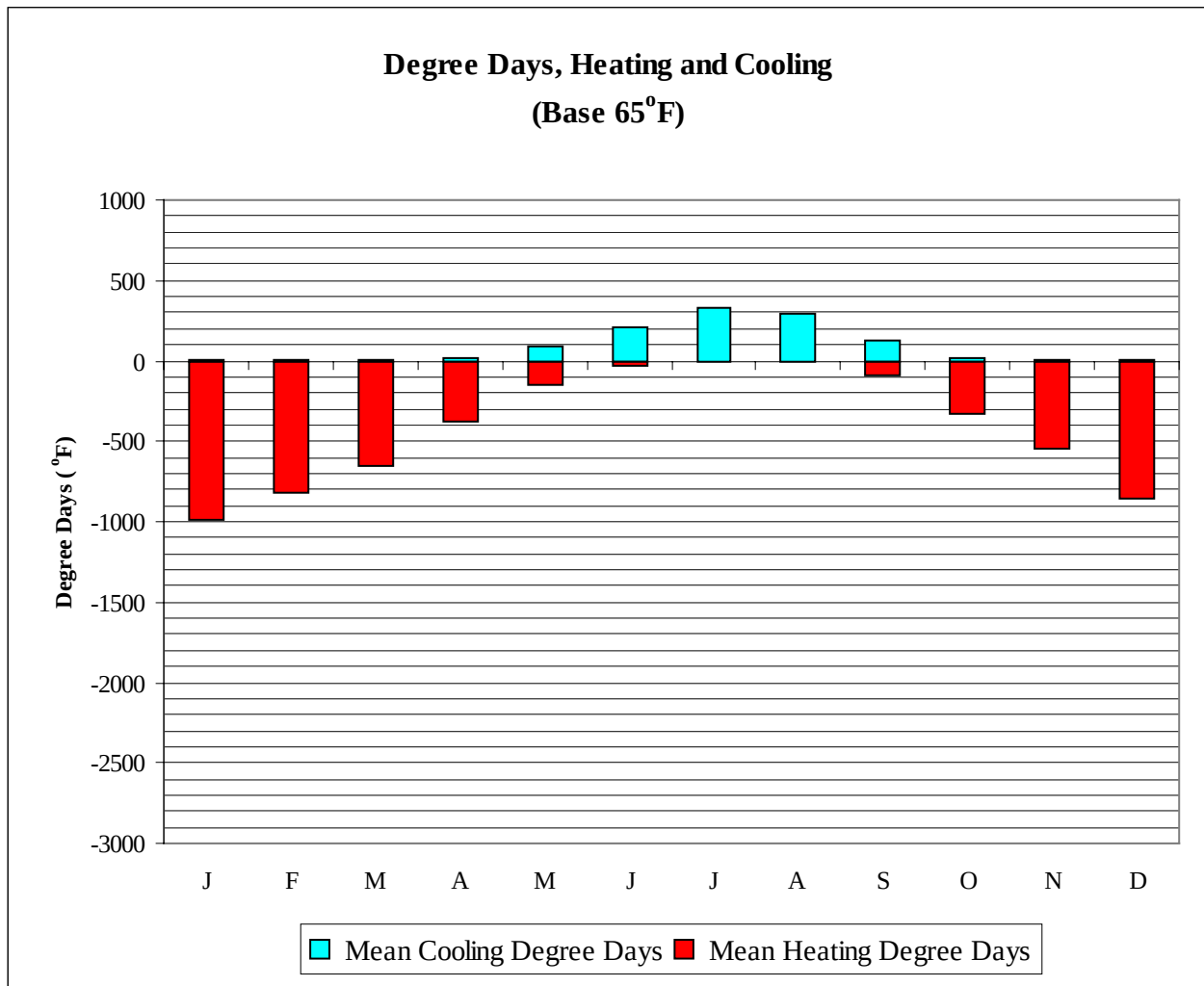


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WMO No. 724095

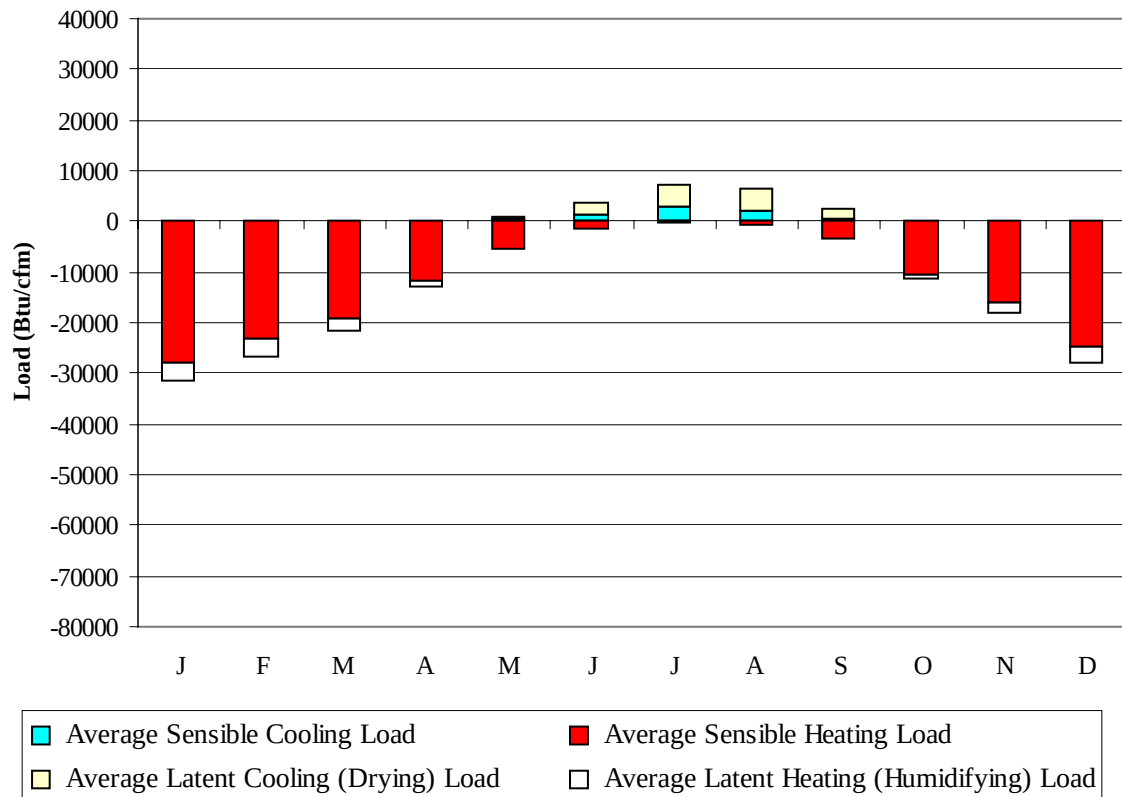
**Long Term Dry Bulb Temperature and Humidity Summary**

| Week Ending | 1.0% Temp (°F) | MCWB @ 1% Temp (°F) | Mean Max Temp (°F) | Mean Min Temp (°F) | 99% Temp (°F) | 1.0% HR (gr/lb) | MCDB @ 1% HR (°F) | Mean Max HR (gr/lb) | Mean Min HR (gr/lb) |
|-------------|----------------|---------------------|--------------------|--------------------|---------------|-----------------|-------------------|---------------------|---------------------|
| 7-Jan       | 60.0           | 56.9                | 38.7               | 24.9               | 11.0          | 72.8            | 58.5              | 24.4                | 12.9                |
| 14-Jan      | 58.0           | 55.6                | 36.1               | 22.8               | 7.0           | 68.6            | 58.3              | 23.2                | 11.1                |
| 21-Jan      | 60.0           | 50.7                | 36.4               | 20.8               | -4.0          | 53.9            | 59.0              | 21.5                | 11.0                |
| 28-Jan      | 58.0           | 53.8                | 40.8               | 25.1               | 6.0           | 67.2            | 57.8              | 26.3                | 13.3                |
| 4-Feb       | 59.0           | 51.2                | 38.9               | 23.5               | 9.0           | 50.4            | 51.7              | 21.6                | 11.1                |
| 11-Feb      | 58.0           | 52.6                | 36.2               | 20.0               | 5.0           | 48.3            | 50.7              | 18.6                | 9.5                 |
| 18-Feb      | 60.0           | 52.4                | 39.2               | 22.6               | 3.0           | 47.6            | 52.2              | 23.0                | 11.8                |
| 25-Feb      | 65.0           | 52.3                | 47.1               | 29.8               | 14.0          | 63.0            | 58.6              | 32.4                | 17.2                |
| 4-Mar       | 66.0           | 51.7                | 44.2               | 28.2               | 13.0          | 63.7            | 67.0              | 25.9                | 14.6                |
| 11-Mar      | 66.0           | .                   | 48.0               | 31.4               | 13.0          | 67.9            | 60.4              | 32.7                | 17.7                |
| 18-Mar      | 74.0           | 63.9                | 50.7               | 32.1               | 17.0          | 78.4            | 67.1              | 33.1                | 16.6                |
| 25-Mar      | 70.0           | 55.3                | 51.4               | 33.6               | 21.0          | 65.1            | 56.0              | 31.6                | 17.5                |
| 1-Apr       | 77.0           | 64.3                | 56.3               | 38.5               | 28.0          | 74.9            | 67.9              | 39.8                | 23.3                |
| 8-Apr       | 76.0           | 61.3                | 56.6               | 39.4               | 29.0          | 79.1            | 65.5              | 40.4                | 22.9                |
| 15-Apr      | 79.0           | 61.0                | 59.3               | 39.7               | 29.0          | 81.2            | 68.6              | 41.3                | 23.2                |
| 22-Apr      | 85.0           | 67.0                | 64.3               | 44.5               | 34.0          | 84.0            | 74.1              | 45.5                | 28.3                |
| 29-Apr      | 84.0           | 65.3                | 65.9               | 45.9               | 35.0          | 87.5            | 68.4              | 50.2                | 31.2                |
| 6-May       | 82.0           | 72.0                | 65.8               | 47.9               | 40.0          | 86.8            | 73.3              | 54.1                | 34.1                |
| 13-May      | 85.0           | 68.7                | 70.0               | 49.6               | 40.0          | 100.1           | 73.3              | 61.4                | 38.8                |
| 20-May      | 89.0           | 71.5                | 71.7               | 53.2               | 43.0          | 104.3           | 77.1              | 68.8                | 45.4                |
| 27-May      | 89.0           | 69.0                | 75.6               | 55.2               | 46.0          | 109.2           | 75.5              | 74.2                | 48.7                |
| 3-Jun       | 90.0           | 72.3                | 77.0               | 57.7               | 49.0          | 116.9           | 83.7              | 82.6                | 55.4                |
| 10-Jun      | 91.0           | 75.0                | 78.0               | 58.3               | 49.0          | 124.6           | 78.9              | 83.4                | 56.9                |
| 17-Jun      | 93.0           | 73.1                | 80.5               | 60.1               | 49.0          | 133.0           | 81.9              | 86.9                | 58.9                |
| 24-Jun      | 92.0           | 75.1                | 81.8               | 63.3               | 54.0          | 129.5           | 78.8              | 95.5                | 66.3                |
| 1-Jul       | 91.0           | 73.8                | 82.4               | 63.5               | 56.0          | 128.8           | 82.8              | 96.2                | 67.4                |
| 8-Jul       | 94.0           | 76.1                | 83.7               | 65.4               | 56.0          | 131.6           | 85.3              | 101.5               | 74.2                |
| 15-Jul      | 96.0           | 79.0                | 85.5               | 67.1               | 60.0          | 141.4           | 83.7              | 106.4               | 77.2                |
| 22-Jul      | 97.0           | 78.3                | 86.3               | 68.3               | 61.0          | 147.0           | 86.0              | 113.3               | 83.8                |
| 29-Jul      | 92.0           | 72.2                | 84.1               | 66.3               | 58.0          | 142.1           | 82.6              | 108.1               | 78.5                |
| 5-Aug       | 93.0           | 76.8                | 85.7               | 67.6               | 60.0          | 142.1           | 83.0              | 112.2               | 82.7                |
| 12-Aug      | 91.0           | 75.8                | 82.9               | 65.8               | 55.0          | 140.7           | 83.9              | 106.3               | 79.3                |
| 19-Aug      | 92.0           | 77.3                | 82.2               | 65.7               | 56.0          | 142.8           | 83.7              | 104.2               | 76.5                |
| 26-Aug      | 91.0           | 75.9                | 81.3               | 62.7               | 54.0          | 132.3           | 81.7              | 97.6                | 70.2                |
| 2-Sep       | 94.0           | 77.8                | 82.4               | 64.4               | 51.0          | 141.4           | 83.8              | 104.5               | 75.4                |
| 9-Sep       | 92.0           | 77.3                | 79.1               | 60.7               | 49.0          | 131.6           | 83.5              | 91.3                | 64.7                |
| 16-Sep      | 88.0           | 70.9                | 77.1               | 57.8               | 46.0          | 119.7           | 82.7              | 85.3                | 57.4                |
| 23-Sep      | 86.0           | 71.5                | 73.1               | 56.5               | 43.0          | 123.9           | 81.2              | 83.6                | 57.2                |
| 30-Sep      | 81.0           | 68.0                | 69.8               | 51.5               | 41.0          | 111.3           | 71.9              | 68.3                | 45.3                |
| 7-Oct       | 80.0           | 64.7                | 67.5               | 48.7               | 37.0          | 103.6           | 71.8              | 63.4                | 40.3                |
| 14-Oct      | 79.0           | 67.2                | 64.4               | 44.4               | 33.0          | 97.3            | 71.3              | 55.0                | 34.3                |
| 21-Oct      | 76.0           | 67.0                | 63.6               | 43.6               | 31.0          | 92.4            | 68.5              | 52.6                | 32.4                |
| 28-Oct      | 74.0           | 61.8                | 62.2               | 42.6               | 31.0          | 93.8            | 67.4              | 51.4                | 30.9                |
| 4-Nov       | 75.0           | 61.8                | 59.7               | 41.5               | 29.0          | 83.3            | 63.5              | 45.5                | 28.2                |
| 11-Nov      | 72.0           | 61.4                | 56.7               | 39.7               | 25.0          | 92.4            | 68.0              | 44.6                | 26.7                |
| 18-Nov      | 69.0           | 58.7                | 54.3               | 36.6               | 25.0          | 78.4            | 66.3              | 37.5                | 20.6                |
| 25-Nov      | 68.0           | 62.0                | 51.3               | 34.9               | 21.0          | 77.7            | 67.8              | 36.1                | 20.9                |
| 2-Dec       | 66.0           | 60.0                | 50.0               | 33.2               | 22.0          | 86.8            | 65.8              | 36.5                | 18.7                |
| 9-Dec       | 63.0           | 58.6                | 46.7               | 30.8               | 15.0          | 76.3            | 59.9              | 32.3                | 16.0                |
| 16-Dec      | 59.0           | 52.4                | 42.3               | 28.3               | 12.0          | 56.0            | 54.6              | 27.1                | 15.0                |
| 23-Dec      | 60.0           | 58.2                | 40.5               | 26.2               | 10.0          | 72.8            | 59.3              | 25.9                | 13.4                |
| 31-Dec      | 61.0           | 55.6                | 40.7               | 25.7               | 4.0           | 61.6            | 54.5              | 26.2                | 14.3                |



|     | Mean Cooling<br>Degree Days (°F) | Mean Heating<br>Degree Days (°F) |
|-----|----------------------------------|----------------------------------|
| JAN | 0                                | 986                              |
| FEB | 0                                | 821                              |
| MAR | 4                                | 656                              |
| APR | 21                               | 376                              |
| MAY | 85                               | 151                              |
| JUN | 214                              | 29                               |
| JUL | 329                              | 6                                |
| AUG | 288                              | 11                               |
| SEP | 131                              | 85                               |
| OCT | 23                               | 326                              |
| NOV | 4                                | 539                              |
| DEC | 0                                | 862                              |
| ANN | 1102                             | 4848                             |

**Average Ventilation and Infiltration Loads**  
**(Outside Air vs. 75°F, 60% RH summer; 68°F, 30% RH winter)**



|     | Average Sensible Cooling Load | Average Sensible Heating Load | Average Latent Cooling Load | Average Latent Heating Load |
|-----|-------------------------------|-------------------------------|-----------------------------|-----------------------------|
|     | (Btu/cfm)                     | (Btu/cfm)                     | (Btu/cfm)                   | (Btu/cfm)                   |
| JAN | 0                             | -27810                        | 2                           | -3455                       |
| FEB | 0                             | -23267                        | 0                           | -3256                       |
| MAR | 8                             | -19178                        | 2                           | -2343                       |
| APR | 90                            | -11765                        | 28                          | -1169                       |
| MAY | 469                           | -5436                         | 531                         | -149                        |
| JUN | 1462                          | -1346                         | 2045                        | -5                          |
| JUL | 2871                          | -356                          | 4517                        | 0                           |
| AUG | 2063                          | -599                          | 4458                        | 0                           |
| SEP | 684                           | -3358                         | 1780                        | -19                         |
| OCT | 42                            | -10538                        | 202                         | -614                        |
| NOV | 3                             | -16120                        | 39                          | -1809                       |
| DEC | 0                             | -24634                        | 3                           | -3307                       |
| ANN | 7692                          | -144407                       | 13607                       | -16126                      |

## Average Annual Solar Radiation – Nearest Available Site

(Source: National Renewable Energy Laboratory, Golden CO, 1995)

City: PHILADELPHIA  
 State: PA  
 WBAN No: 13739  
 Lat(N): 39.88  
 Long(W): 75.25  
 Elev(ft): 30

Stn Type: Secondary  
 SHADING GEOMETRY IN DIMENSIONLESS UNITS  
 Window: 1  
 Overhang: 0.53  
 Vert Gap: 0.32

| AVERAGE INCIDENT SOLAR RADIATION (Btu/sq.ft./day), Percentage Uncertainty = 11 |         | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  | Year |
|--------------------------------------------------------------------------------|---------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| HORIZ                                                                          | Global  | 620  | 870  | 1200 | 1520 | 1760 | 1940 | 1890 | 1710 | 1380 | 1020 | 680  | 530  | 1260 |
|                                                                                | Std Dev | 42   | 72   | 91   | 118  | 135  | 115  | 116  | 88   | 100  | 74   | 55   | 39   | 35   |
|                                                                                | Minimum | 520  | 770  | 1010 | 1230 | 1530 | 1640 | 1580 | 1530 | 1180 | 880  | 560  | 430  | 1200 |
|                                                                                | Maximum | 710  | 1080 | 1370 | 1740 | 2050 | 2220 | 2110 | 1850 | 1560 | 1150 | 800  | 610  | 1350 |
|                                                                                | Diffuse | 310  | 420  | 550  | 700  | 840  | 880  | 870  | 760  | 610  | 450  | 330  | 280  | 580  |
| Clear Day                                                                      | Global  | 890  | 1240 | 1710 | 2190 | 2490 | 2590 | 2510 | 2240 | 1820 | 1340 | 940  | 780  | 1730 |
| NORTH                                                                          | Global  | 190  | 260  | 340  | 430  | 540  | 610  | 580  | 480  | 380  | 290  | 210  | 170  | 370  |
|                                                                                | Diffuse | 190  | 260  | 340  | 430  | 500  | 530  | 520  | 460  | 380  | 290  | 210  | 170  | 360  |
| Clear Day                                                                      | Global  | 180  | 240  | 330  | 430  | 580  | 680  | 620  | 480  | 360  | 270  | 200  | 160  | 380  |
| EAST                                                                           | Global  | 420  | 570  | 740  | 900  | 970  | 1050 | 1030 | 970  | 820  | 650  | 450  | 370  | 740  |
|                                                                                | Diffuse | 240  | 320  | 420  | 520  | 600  | 630  | 630  | 570  | 470  | 360  | 250  | 210  | 430  |
| Clear Day                                                                      | Global  | 680  | 870  | 1110 | 1310 | 1410 | 1430 | 1400 | 1310 | 1140 | 910  | 690  | 610  | 1070 |
| SOUTH                                                                          | Global  | 1000 | 1080 | 1070 | 950  | 830  | 790  | 820  | 940  | 1070 | 1150 | 990  | 900  | 960  |
|                                                                                | Diffuse | 340  | 410  | 480  | 540  | 570  | 580  | 580  | 570  | 520  | 450  | 360  | 310  | 480  |
| Clear Day                                                                      | Global  | 1880 | 1930 | 1780 | 1410 | 1080 | 940  | 990  | 1240 | 1580 | 1810 | 1830 | 1800 | 1520 |
| WEST                                                                           | Global  | 430  | 560  | 730  | 880  | 970  | 1050 | 1030 | 960  | 820  | 650  | 450  | 370  | 740  |
|                                                                                | Diffuse | 240  | 320  | 420  | 520  | 610  | 640  | 630  | 580  | 470  | 360  | 260  | 210  | 440  |
| Clear Day                                                                      | Global  | 680  | 870  | 1110 | 1310 | 1410 | 1430 | 1400 | 1310 | 1140 | 910  | 690  | 610  | 1070 |

## Average Annual Solar Heat and Illumination – Nearest Available Site

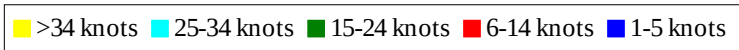
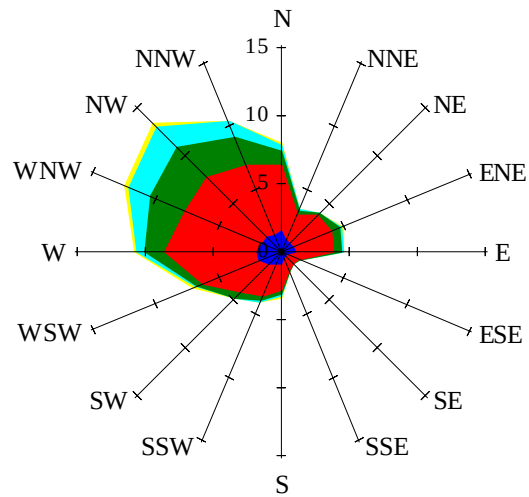
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

| AVERAGE TRANSMITTED SOLAR RADIATION (Btu/sq.ft./day) FOR DOUBLE GLAZING, Percentage Uncertainty = 11 |          | Jan | Feb | Mar | Apr  | May  | Jun  | Jul  | Aug  | Sep | Oct | Nov | Dec | Year |
|------------------------------------------------------------------------------------------------------|----------|-----|-----|-----|------|------|------|------|------|-----|-----|-----|-----|------|
| HORIZ                                                                                                | Unshaded | 400 | 600 | 850 | 1090 | 1270 | 1410 | 1370 | 1240 | 990 | 710 | 450 | 340 | 890  |
| NORTH                                                                                                | Unshaded | 130 | 180 | 240 | 300  | 360  | 400  | 380  | 330  | 260 | 200 | 140 | 120 | 250  |
|                                                                                                      | Shaded   | 120 | 160 | 210 | 260  | 320  | 350  | 340  | 290  | 230 | 180 | 130 | 100 | 220  |
| EAST                                                                                                 | Unshaded | 290 | 400 | 520 | 640  | 690  | 740  | 730  | 690  | 580 | 450 | 310 | 250 | 520  |
|                                                                                                      | Shaded   | 260 | 350 | 460 | 550  | 580  | 620  | 610  | 580  | 500 | 400 | 280 | 230 | 450  |
| SOUTH                                                                                                | Unshaded | 750 | 790 | 740 | 620  | 520  | 480  | 500  | 600  | 730 | 830 | 740 | 680 | 660  |
|                                                                                                      | Shaded   | 730 | 730 | 590 | 410  | 350  | 360  | 360  | 390  | 520 | 730 | 710 | 660 | 540  |
| WEST                                                                                                 | Unshaded | 300 | 390 | 520 | 620  | 690  | 740  | 730  | 680  | 580 | 450 | 310 | 250 | 520  |
|                                                                                                      | Shaded   | 270 | 350 | 450 | 530  | 590  | 630  | 620  | 580  | 500 | 400 | 280 | 220 | 450  |

| AVERAGE INCIDENT ILLUMINANCE (klux-hr) FOR MOSTLY CLEAR AND MOSTLY CLOUDY CONDITIONS, Percentage Uncertainty = 11 |          |       |      |     |     |     |      |      |     |     |     |
|-------------------------------------------------------------------------------------------------------------------|----------|-------|------|-----|-----|-----|------|------|-----|-----|-----|
|                                                                                                                   |          | March |      |     |     |     | June |      |     |     |     |
|                                                                                                                   |          | 9am   | 11am | 1pm | 3pm | 5pm | 9am  | 11am | 1pm | 3pm | 5pm |
| HORIZ.                                                                                                            | M.Clear  | 39    | 71   | 80  | 63  | 25  | 47   | 83   | 100 | 94  | 66  |
|                                                                                                                   | M.Cloudy | 22    | 43   | 48  | 37  | 15  | 28   | 55   | 69  | 66  | 44  |
| NORTH                                                                                                             | M.Clear  | 10    | 14   | 15  | 13  | 8   | 18   | 17   | 17  | 17  | 16  |
|                                                                                                                   | M.Cloudy | 9     | 15   | 16  | 13  | 6   | 13   | 18   | 20  | 19  | 15  |
| EAST                                                                                                              | M.Clear  | 72    | 55   | 15  | 13  | 8   | 75   | 71   | 30  | 17  | 16  |
|                                                                                                                   | M.Cloudy | 25    | 29   | 16  | 13  | 6   | 31   | 42   | 26  | 19  | 15  |
| SOUTH                                                                                                             | M.Clear  | 39    | 73   | 82  | 64  | 25  | 12   | 33   | 47  | 42  | 21  |
|                                                                                                                   | M.Cloudy | 17    | 35   | 40  | 30  | 11  | 11   | 25   | 35  | 32  | 17  |
| WEST                                                                                                              | M.Clear  | 10    | 14   | 24  | 66  | 61  | 12   | 17   | 17  | 53  | 76  |
|                                                                                                                   | M.Cloudy | 9     | 15   | 19  | 31  | 20  | 11   | 18   | 20  | 38  | 42  |
| M.Clear                                                                                                           | (% hrs)  | 36    | 33   | 31  | 32  | 35  | 40   | 39   | 37  | 35  | 37  |
|                                                                                                                   |          | Sept  |      |     |     |     | Dec  |      |     |     |     |
|                                                                                                                   |          | 9am   | 11am | 1pm | 3pm | 5pm | 9am  | 11am | 1pm | 3pm | 5pm |
| HORIZ.                                                                                                            | M.Clear  | 28    | 66   | 83  | 76  | 45  | 14   | 40   | 45  | 27  | 2   |
|                                                                                                                   | M.Cloudy | 16    | 40   | 53  | 50  | 28  | 8    | 22   | 26  | 16  | 2   |
| NORTH                                                                                                             | M.Clear  | 9     | 14   | 16  | 16  | 12  | 5    | 10   | 10  | 8   | 1   |
|                                                                                                                   | M.Cloudy | 7     | 14   | 18  | 16  | 11  | 4    | 9    | 10  | 7   | 1   |
| EAST                                                                                                              | M.Clear  | 62    | 68   | 27  | 16  | 12  | 39   | 37   | 10  | 8   | 1   |
|                                                                                                                   | M.Cloudy | 20    | 33   | 22  | 16  | 11  | 10   | 16   | 10  | 7   | 1   |
| SOUTH                                                                                                             | M.Clear  | 21    | 57   | 75  | 67  | 37  | 36   | 79   | 85  | 58  | 5   |
|                                                                                                                   | M.Cloudy | 10    | 29   | 42  | 39  | 20  | 10   | 27   | 31  | 19  | 1   |
| WEST                                                                                                              | M.Clear  | 9     | 14   | 16  | 53  | 71  | 5    | 10   | 22  | 46  | 7   |
|                                                                                                                   | M.Cloudy | 7     | 14   | 18  | 33  | 31  | 4    | 9    | 13  | 16  | 2   |
| M.Clear                                                                                                           | (% hrs)  | 43    | 45   | 43  | 39  | 40  | 33   | 32   | 30  | 31  | 36  |

### Wind Summary - December, January, and February

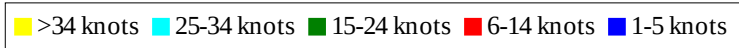
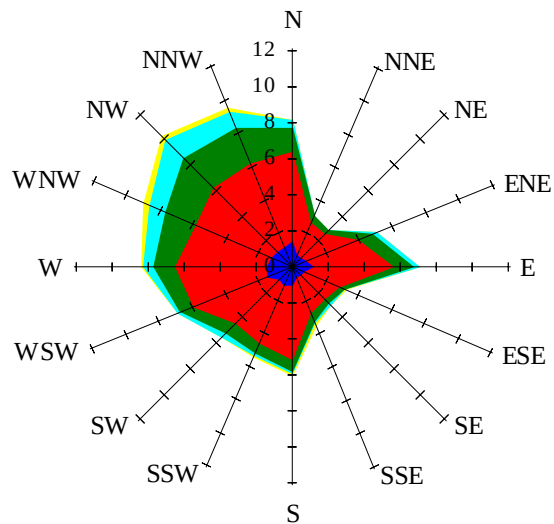
Labels of Percent Frequency on North Axis



Percent Calm = 6.00

### Wind Summary - March, April, and May

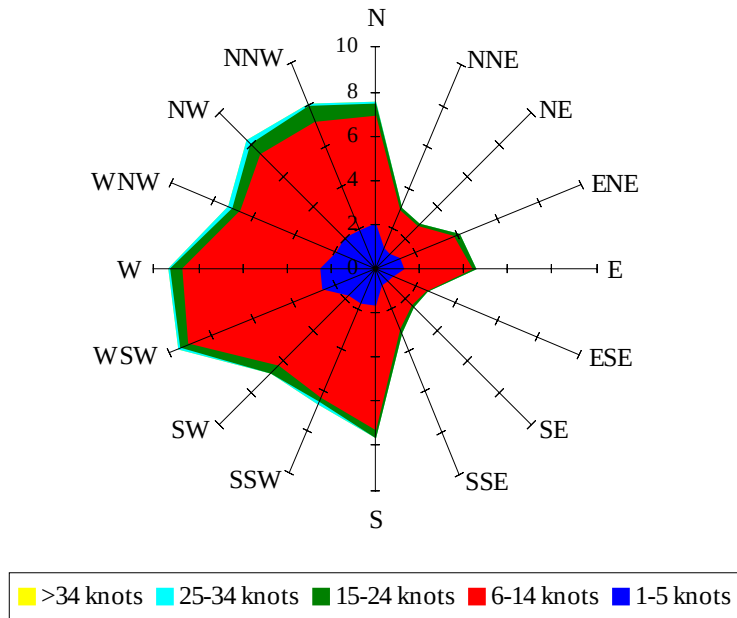
Labels of Percent Frequency on North Axis



Percent Calm = 4.69

### Wind Summary - June, July, and August

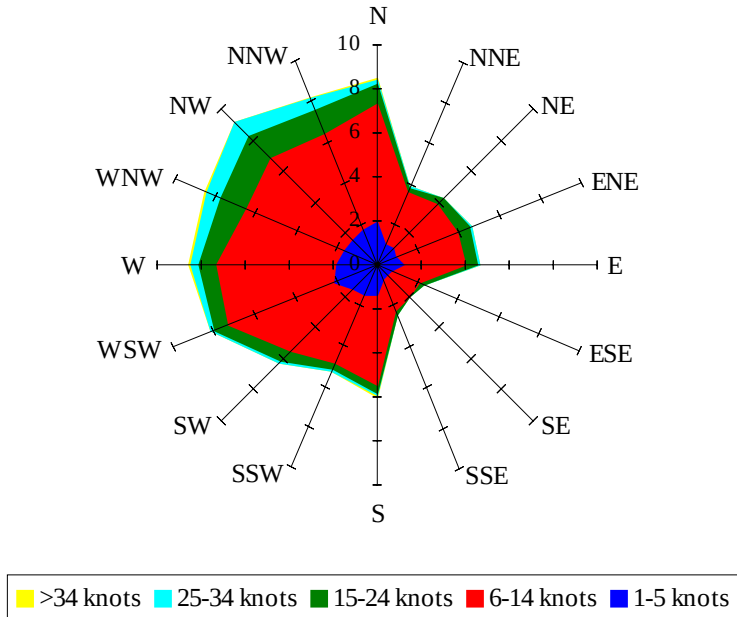
Labels of Percent Frequency on North Axis



Percent Calm = 7.20

### Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 7.35